

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,356	11/26/2003	Tsutomu Sakata	p24520.dc1.doc	6150
7055	7590 06/17/2004		EXAMINER .	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE			HARRIS, ANTON B	
RESTON, V			ART UNIT PAPER NUMBER	
•		·	2831	
			DATE MAILED: 06/17/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

			Ar			
	Application No.	Applicant(s)				
	10/721,356	SAKATA, TSUTOM	U			
Office Action Summary	Examiner	Art Unit				
	Anton B Harris	2831				
The MAILING DATE of this commun Period for Reply	ication appears on the cover shee	t with th correspond nc addi	ress			
A SHORTENED STATUTORY PERIOD F THE MAILING DATE OF THIS COMMUN - Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this comm - If the period for reply specified above, the maximum st - Failure to reply within the set or extended period for reply Any reply-received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b).	ICATION. s of 37 CFR 1.136(a). In no event, however, manunication. style="color: blue;">100 days, a reply within the statutory minimum of atutory period will apply and will expire SIX (6) will, by statute, cause the application to become	ay a reply be timely filed If thirty (30) days will be considered timely. MONTHS from the mailing date of this com the ABANDONED (35 U.S.C. § 133).	nmunication.			
Status						
1) Responsive to communication(s) file	ed on <u>26 November 2003</u> .					
2a) This action is FINAL.	2b)⊠ This action is non-final.					
• •						
closed in accordance with the practi	ice under <i>Ex parte Quayle</i> , 1935	C.D. 11, 453 O.G. 213.				
Disposition of Claims						
4) ⊠ Claim(s) 1-31 is/are pending in the a 4a) Of the above claim(s) is/a 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-31 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restrict	re withdrawn from consideration.					
Application Papers						
9) The specification is objected to by the specification is objected to by the specific speci	: a) accepted or b) objected or b) o	eyance. See 37 CFR 1.85(a). ving(s) is objected to. See 37 CFF	· ·			
Priority under 35 U.S.C. § 119						
12) △ Acknowledgment is made of a claim a) △ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority 2. △ Certified copies of the priority 3. ☐ Copies of the certified copies	documents have been received. documents have been received of the priority documents have be onal Bureau (PCT Rule 17.2(a)).	in Application No. <u>10/721,356</u> . een received in this National S	tage			
Attachment(s) 1) Motice of References Cited (PTO-892)	4) □ Intervi	ew Summary (PTO-413)				
 2) Notice of Nederlendes Offed (170-032) 2) Notice of Draftsperson's Patent Drawing Review (F 3) Information Disclosure Statement(s) (PTO-1449 or Paper No(s)/Mail Date 02/24/04 and 04/15. 	PTO-948) Paper	No(s)/Mail Date of Informal Patent Application (PTO-	152)			

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato (6,525,269 B2).

Regarding claim 1, Sato (col. 2, line 16- col. 3, line 34) discloses a grommet comprising: a longitudinal axis (figure 4 to the left of reference line 11a);

a funnel shaped portion (col. 2, lines 36-37) extending along said longitudinal axis (figure 4 to the left of reference line 11a) and a tubular portion 11 joined thereto by a circular joint section 15c;

said funnel shaped portion (col. 2, lines 36-37) having a generally conical wall 13 with external and internal generally conical faces (see figure 1) and a flared end (see figure 1), the external generally conical face (see figure 1) comprising a plurality of funnel ribs 11c and an external circular groove 15d with a groove base 15;

wherein said external circular groove 15d is engageable with a through-hole (col. 2, lines 32-33) formed in a body panel 9 of a vehicle; and

wherein said funnel shaped portion (col. 2, lines 36-37) comprises a device T to improve flexibility of and/or space availability for the wire harness 7 when mounted, including one of:

Page 3

Art Unit: 2831

an extended tubular portion 17 configured to hold the water trapping zone of the wire harness (col. 2, lines 57-59);

a structural configuration allowing the length of said grommet 10 along said longitudinal axis (figure 4 to the left of reference line 11a) of said funnel shaped portion (col. 2, lines 36-37) to be reduced, such that the wire harness 7 can be wired substantially alongside the body panel 9; and

a circular space between said plurality of funnel ribs 11c near said circular joint section 15c and said tubular portion 11.

Regarding claim 2, Sato (col. 2, line 16- col. 3, line 34) discloses that an extended tubular portion 18 extends from said circular joint section 15c toward the inside of said funnel shaped portion (col. 2, lines 36-37).

Regarding claim 3, Sato (col. 2, line 16- col. 3, line 34) discloses that an extended tubular portion 18 comprises a cylindrical wall 18a and an end section 18e distal from said circular joint section 15c, and wherein the thickness of said cylindrical wall 18a of said extended tubular portion 18 increases from said end section 18e to said circular joint section 15c.

Regarding claim 4, Sato (col. 2, line 16- col. 3, line 34) discloses that a tubular portion 11 and said extended tubular portion 18 have an internal diameter smaller than the external diameter of the wire harness 7 to be mounted.

Regarding claim 5, Sato (col. 2, line 16- col. 3, line 34) discloses that an extended tubular portion 18 has an external cylindrical 18a face which comprises anti-tear-offribs 11c extending along the longitudinal direction thereof and joined to said conical wall 13 of said funnel-shaped portion (col. 2, lines 36-37).

Application/Control Number: 10/721,356

Art Unit: 2831

Regarding claims 6 and 27, Sato (col. 2, line 16- col. 3, line 34) discloses that a structural configuration has a length L along said longitudinal axis (figure 4 to the left of reference line 11a) from said groove base 15 of said funnel shaped portion (col. 2, lines 36-37) to said circular joint section 15c thereof and a diameter D in a plane normal to said longitudinal axis (figure 4 to the left of reference line 11a) and including said groove base 15, and wherein the ratio of L:D is in the range of approximately 1:5 to 1:3.

Regarding claim 7, Sato (col. 2, line 16- col. 3, line 34) discloses that a ratio L:D is approximately 1:4.

Regarding claims 8 and 28, Sato (col. 2, line 16- col. 3, line 34) discloses that a plurality of funnel ribs 11c have first end sections adjacent said circular joint section 15c and second end sections, and radiate in multiple directions from said first end sections on said external conical face of said funnel-shaped portion (col. 2, lines 36-37), and wherein said first end sections form a circular space around said tubular portion 11, such that said tubular portion 11 can be flexed independently from said plurality of funnel ribs 11c.

Regarding claim 9, Sato (col. 2, line 16- col. 3, line 34) discloses that a circular joint section 15c comprises a circular recess (see figure 1) formed on a portion of said internal conical face (see figure 1) of said funnel shaped portion (col. 2, lines 36-37) which is opposed to said circular space.

Regarding claim 10, Sato (col. 2, line 16- col. 3, line 34) discloses that first end sections (figure 1) have a radial projection greater than a radial projection of said second end sections (figure 1), and said first end sections (figure 1), when viewed in a longitudinal sectional plane,

Application/Control Number: 10/721,356

Art Unit: 2831

extend substantially parallel to said longitudinal axis (figure 4 to the left of reference line 11a) along said tubular portion 11.

Regarding claims 11 and 29, Sato (col. 2, line 16- col. 3, line 34) discloses that a flared end (figure 1) of said funnel shaped portion (col. 2, lines 36-37) comprises a closing face (figure 1) that includes a harness 7 receiving aperture 11a, from the rim (figuree1) of which a second tubular portion 17 protrudes outwardly.

Regarding claim 12, Sato (col. 2, line 16- col. 3, line 34) discloses that a second tubular portion 17 is formed of two arched channels (see figure) which extend from said closing face (figure 1) adjacent said harness 7 receiving aperture 11a.

Regarding claims 13 and 30, Sato (col. 2, line 16- col. 3, line 34) discloses that a funnel-shaped portion contains (col. 2, lines 36-37) at least one auxiliary tube 16 extending along a line parallel to said longitudinal axis (figure 4 to the left of reference line 11a), and wherein a first end of said at least one auxiliary tube 16 extends out through said conical wall 13 of said funnel shaped portion (col. 2, lines 36-37), while a second end of said at least one auxiliary tube 16 extends beyond said flared end of said funnel shaped portion (col. 2, lines 36-37).

Regarding claim 14, Sato (col. 2, line 16- col. 3, line 34) discloses that at least one auxiliary tube 16 comprises a reinforcing device 16c.

Regarding claim 15, Sato (col. 2, line 16- col. 3, line 34) discloses that at least one auxiliary tube 16 comprises an external circular face (figure 1), and said reinforcing device 16c comprises at least one elongate link (figure 1 to the right of reference line 16b) binding said external circular face (figure 1) of said at least one auxiliary tube 16 to said conical wall 13 of said funnel shaped portion (col. 2, lines 36-37).

Application/Control Number: 10/721,356

Art Unit: 2831

Regarding claim 16, Sato (col. 2, line 16- col. 3, line 34) discloses that at least one auxiliary tube 16 comprises an external circular face (figure 1), and said reinforcing device 16c comprises at least one longitudinal rib 16b extending along a line spaced from said at least one elongate link (figure 1 to the right of reference line 16b).

Regarding claim 17, Sato (col. 2, line 16- col. 3, line 34) discloses that at least one auxiliary tube 16 comprises an internal circular face (figure 1), and said reinforcing device 16c comprises at least one circular rib (figure 1 below reference line 16c) provided thereon.

Regarding claim 18, Sato (col. 2, line 16- col. 3, line 34) discloses that at least one auxiliary tube comprises a first auxiliary tube 17 configured to receive a washer hose and a second auxiliary tube 16 configured to receive a hood wire.

Regarding claim 19, Sato (col. 2, line 16- col. 3, line 34) discloses that a flared end of said funnel shaped portion (col. 2, lines 36-37) comprises a closing face (figure 1) that includes a first auxiliary aperture (figure 1 below reference line 17a), a harness-receiving aperture 11a and a second auxiliary aperture (figure 1 below reference line 16a) that are centrally aligned substantially along a common diameter line of said closing face (figure 1) and arranged in that order along said diameter line, and communicate with each other through an open passage Y, and wherein a second tubular portion 18 extends outwardly from the rim of said harness-receiving aperture 11a and said at least one auxiliary tube 17 protrudes outwardly through said corresponding first (figure 1 below reference line 17a) and second auxiliary apertures (figure 1 below reference line 16a).

Regarding claims 20 and 31, Sato (col. 2, line 16- col. 3, line 34) discloses that an external circular groove 15d defines a first groove wall section (figure 1 below reference line

15d) substantially in a plane normal to said longitudinal axis (figure 4 to the left of reference line 11a) of said grommet 10, located at a groove 15d side nearest to said flared end (figure 1), and a second groove wall section (figure 1 above reference line 15d) inclined towards said flared end (figure 1), located at a groove 15d side closest to said narrowed end (figure 1), whereby said funnel shaped portion (col. 2, lines 36-37) is caused to be squeezed around said inclined wall (figure 1 above reference line 15d) when said grommet 10 is passed through the through-hole (col. 2, lines 32-33).

Regarding claim 21, Sato (col. 2, line 16- col. 3, line 34) discloses that a plurality of funnel ribs 11c have first end sections (figure 1) adjacent said circular joint section 15c and second end sections (figure 1) adjacent said second groove wall section (figure 1 above reference line 15d), and radiate in multiple directions from said first end sections (figure 1) to said second end sections (figure 1) on said external conical face (figure 1 under reference line 13) of said funnel shaped portion (col. 2, lines 36-37), and said funnel ribs 11c comprise an outermost face having a radial projection which decreases substantially from said first end section (figure 1) to said second end section (figure 1).

Regarding claim 22, Sato (col. 2, line 16- col. 3, line 34) discloses that funnel ribs 16c have an outermost face (figure 1) which subtends a first angle relative to said longitudinal axis (figure 4 to the left of reference line 11a), from said first end section (figure 1) of said funnel ribs 11c to a first mark where said grommet 10 comes into contact with said peripheral rim (figure 1) of said through-hole (col. 2, lines 32-33) when it is mounted, and said outermost face (figure 1) subtends a second angle which is smaller than said first angle, from said first mark to a second mark where said outermost face (figure 1) substantially extends to the level of the radial distance, perpendicular to said longitudinal axis (figure 4 to the left of reference line 11a), of said second groove wall section (figure 1 above reference line 15d).

Regarding claim 23, Sato (col. 2, line 16- col. 3, line 34) discloses that outermost face (figure 1) extends substantially parallel to said longitudinal axis (figure 4 to the left of reference line 11a) from said second mark to said second end portion (figure 1) of said funnel ribs 11c.

Regarding claim 24, Sato (col. 2, line 16- col. 3, line 34) discloses that a funnel shaped portion (col. 2, lines 36-37) comprises a peripheral notch (figure 1) adjacent said second mark.

Regarding claim 25, Sato (col. 2, line 16- col. 3, line 34) discloses a grommet comprising:

- a longitudinal axis (figure 4 to the left of reference line 11a);
- a funnel shaped portion (col. 2, lines 36-37) and a tubular portion 11 joined thereto by a circular joint section 15c;

said funnel shaped portion (col. 2, lines 36-37) having a generally conical wall 13 with external and internal generally conical faces (figure 1 below reference line 13) and a flared end Figure 1), the external generally conical face (figure 1 below reference line 13) comprising a plurality of funnel ribs 11c and an external circular groove 15d with a groove base 15;

wherein said external circular groove 15d is engageable with a through-hole (col. 2, lines 32-33) formed in a body panel 9 of a vehicle, and

wherein said funnel shaped portion (col. 2, lines 36-37) comprises a device T to improve flexibility of and/or space availability for the wire harness 7 when mounted, including one of:

an extended tubular portion 17 configured to hold the water trapping zone of the wire harness 7;

a structural configuration allowing the length of said grommet 10 along said longitudinal axis (figure 4 to the left of reference line 11a) of the funnel shaped portion (col. 2, lines 36-37) to be reduced, such that the wire harness 7 can be wired substantially alongside the body panel 9; and

a circular space between said plurality of funnel ribs 11c near the circular joint section 15c and said tubular portion 11;

wherein the body panel 9 is positioned between an engine compartment and a passenger compartment, said tubular portion 11 of said grommet 10 containing a wire harness 7 is inserted from the engine compartment to the passenger compartment through the through-hole (col. 2, lines 32-33) and the through-hole (col. 2, lines 32-33) is fitted with said external circular groove 15d, whereby said tubular portion 11 extends inside the passenger compartment and can be bent together with the wire harness 7.

Regarding claim 26, Sato (col. 2, line 16- col. 3, line 34) discloses that an extended tubular portion 18 extends from said circular joint section 15c toward the inside of said funnel shaped portion (col. 2, lines 36-37).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mochizuki U.S. Patent No. 6,240,597 B1 discloses a grommet including a flexible member, a groove, a tubular portion, and plurality of ribs.

Page 10

Application/Control Number: 10/721,356

Art Unit: 2831

Semrau U.S. Patent No. 4,901,398 discloses a grommet including a flexible member, a groove, and a tubular portion.

Lott U.S. Patent No. 3,584,888 discloses a grommet including a flexible member, a groove, and a tapered hole.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anton B Harris whose telephone number is (571) 272-1976. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dean Reichard, can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

abh

6/12/04

SUPERVISORY PATENT EXAMINER

plean a. Bechar 6/14/04

TECHNOLOGY CENTER 2800